

IN THE CLAIMS

Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) An ultrasonic diagnosis apparatus, comprising:
 - a first storage unit configured to store digital reception beam data converted from a reception beam formed from an ultrasonic received signal;
 - a first control configured to control reading and writing of data from/in the first storage unit;
 - a filter coefficient calculation portion-unit configured to calculate a filter coefficient based on information on the reception beam, the information including a positional relationship between the reception beam and a transmission beam; and
 - a first spatial filter operation portion-unit configured to subject each of a plurality of the reception beam data, including reception beam data converted from parallel reception beams received in parallel from a single transmission beam, to filtering for reducing a difference in image quality between adjacent beams based on the filter coefficient, thereby outputting image data; and [[,]]
~~wherein a scanning conversion unit configured to perform a scan conversion on the image data output from the first spatial filter operation portion-unit are converted into scanning of a display monitor so as to display an image on the display monitor,~~
~~wherein the first spatial filter operation portion-unit also is configured to filter the reception beam data converted from the reception beams including one target reception beam and the adjacent plural reception beams, thereby generating the image data at a specified sampling point on the target reception beam, and~~
~~the filter coefficient calculation portion-unit also is configured to apply the filter coefficient to the reception beam datum converted from the parallel reception beam received in parallel with the target reception beam so as to be smaller than the filter coefficient applied to the reception beam data which is converted from the reception~~

beam other than the parallel reception beam and is symmetrical in positional relationship to the reception beam data with respect to a center at a position of the target reception beam.

2. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, further comprising:

an ultrasonic reception data processing portion unit;

a two-dimensional Doppler signal processing portion unit for subjecting reception beam data from ~~an~~ the ultrasonic reception data processing portion unit to two-dimensional Doppler processing;

a second storage unit for storing two-dimensional Doppler data output from the two-dimensional Doppler signal processing portion unit;

a second control for controlling reading and writing of data from/in the second storage unit means; and

a second spatial filter operation portion unit for subjecting each of a plurality of the received two-dimensional Doppler data including data of beams received in parallel from a single transmission beam to filtering for reducing a difference in image quality between adjacent beams based on the filter coefficient supplied from the filter coefficient calculation portion unit.

3. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion unit is able configured to control the filter coefficient in accordance with a receiving depth.

4. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion unit is able configured to control the filter coefficient in accordance with an angle of the reception beam.

5. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, wherein the filter coefficient calculation portion unit is able configured to control the filter coefficient in accordance with a focal position of the transmission beam.

6. (Currently Amended) The ultrasonic diagnosis apparatus according to claim 1, further comprising:

a two-dimensional Doppler signal processing portion-unit for subjecting reception beam data to two-dimensional Doppler processing;

a second storage unit for storing two-dimensional Doppler data output from the two-dimensional Doppler signal processing unit-portion;

a second control for controlling reading and writing of data from/in the second storage unit-means; and

a second spatial filter operation portion-unit for subjecting each of a plurality of the received two-dimensional Doppler data including data of beams received in parallel from a single transmission beam to filtering for reducing a difference in image quality between adjacent beams based on the filter coefficient supplied from the filter coefficient calculation unit-portion.